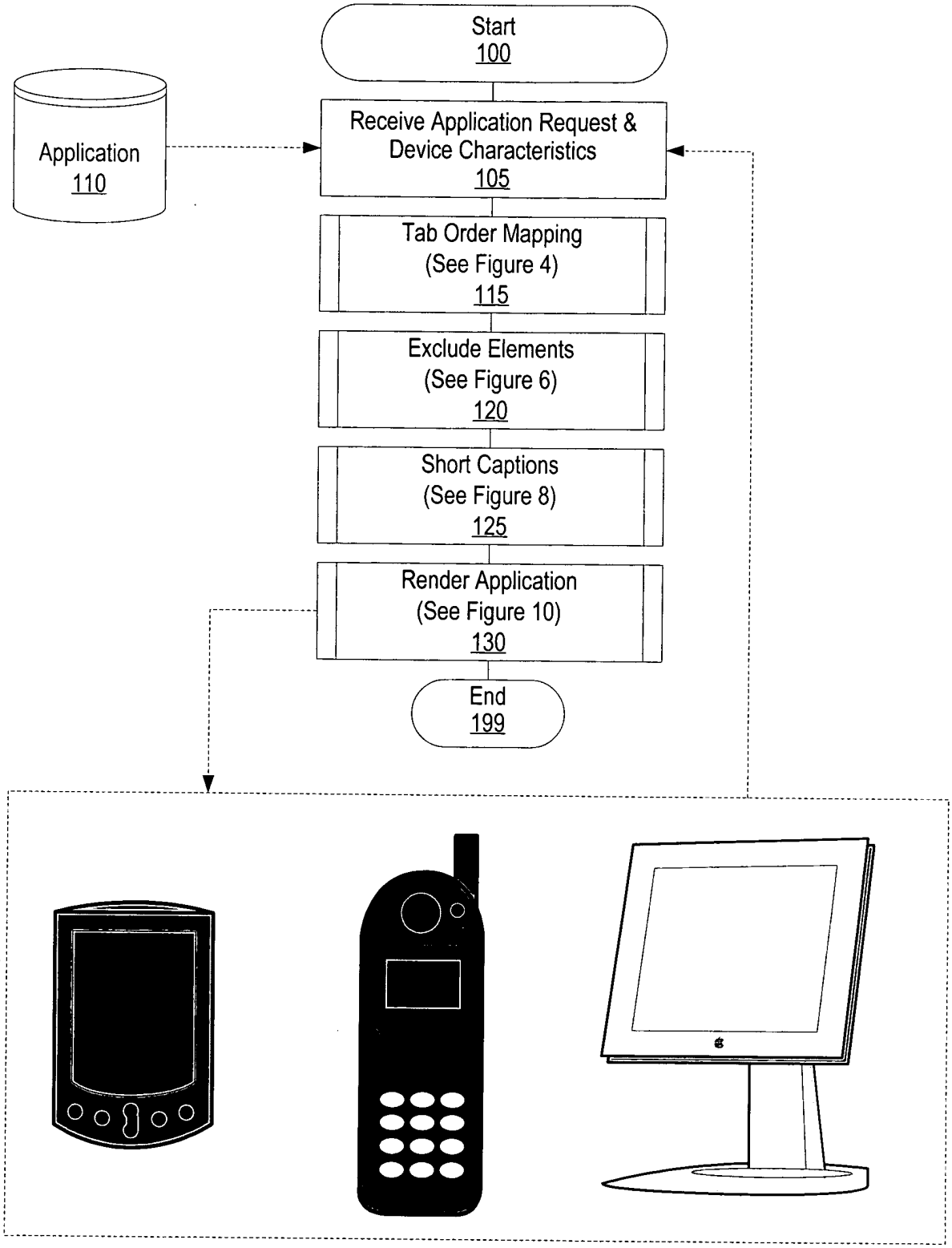
Start
100
Application
110
Receive Application Request &
Device Characteristics
105
Tab Order Mapping
(See Figure 4)
115
Exclude Elements
(See Figure 6)
120
Short Captions
(See Figure 8)
125
Render Application
(See Figure 10)
130
End
199

Figure 1

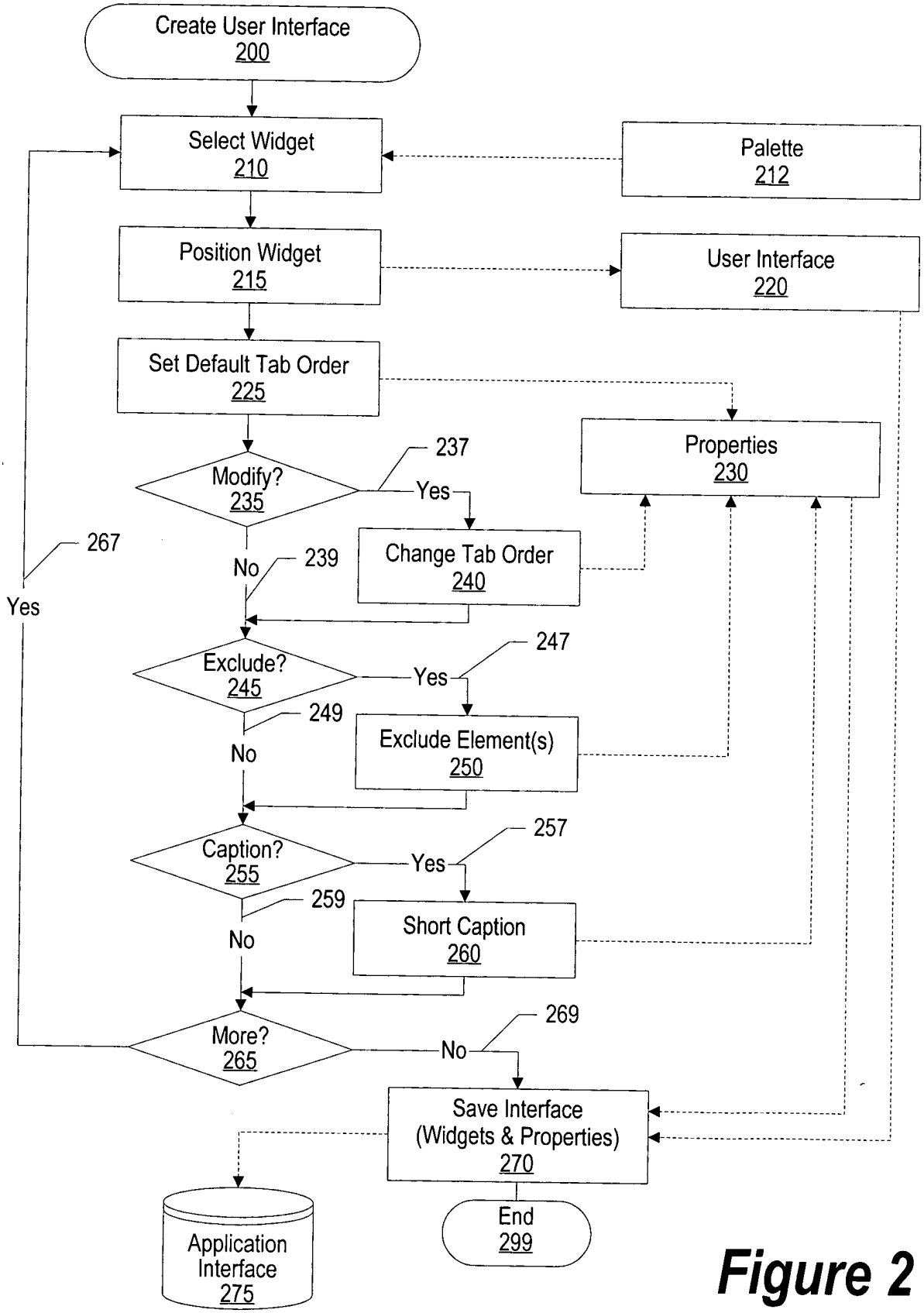
Create User Interface
200
Select Widget
210
Palette
212
Position Widget
215
User Interface
220
Set Default Tab Order
225
Properties
230
Modify?
235
237
Yes
No
239
Change Tab Order
240
267
Yes
Exclude?
245
247
Yes
249
No
Exclude Element(s)
250
Caption?
255
257
Yes
259
No
Short Caption
260
More?
265
269
No
Save Interface
(Widgets & Properties)
270
Application
Interface
275
End
299

Figure 2

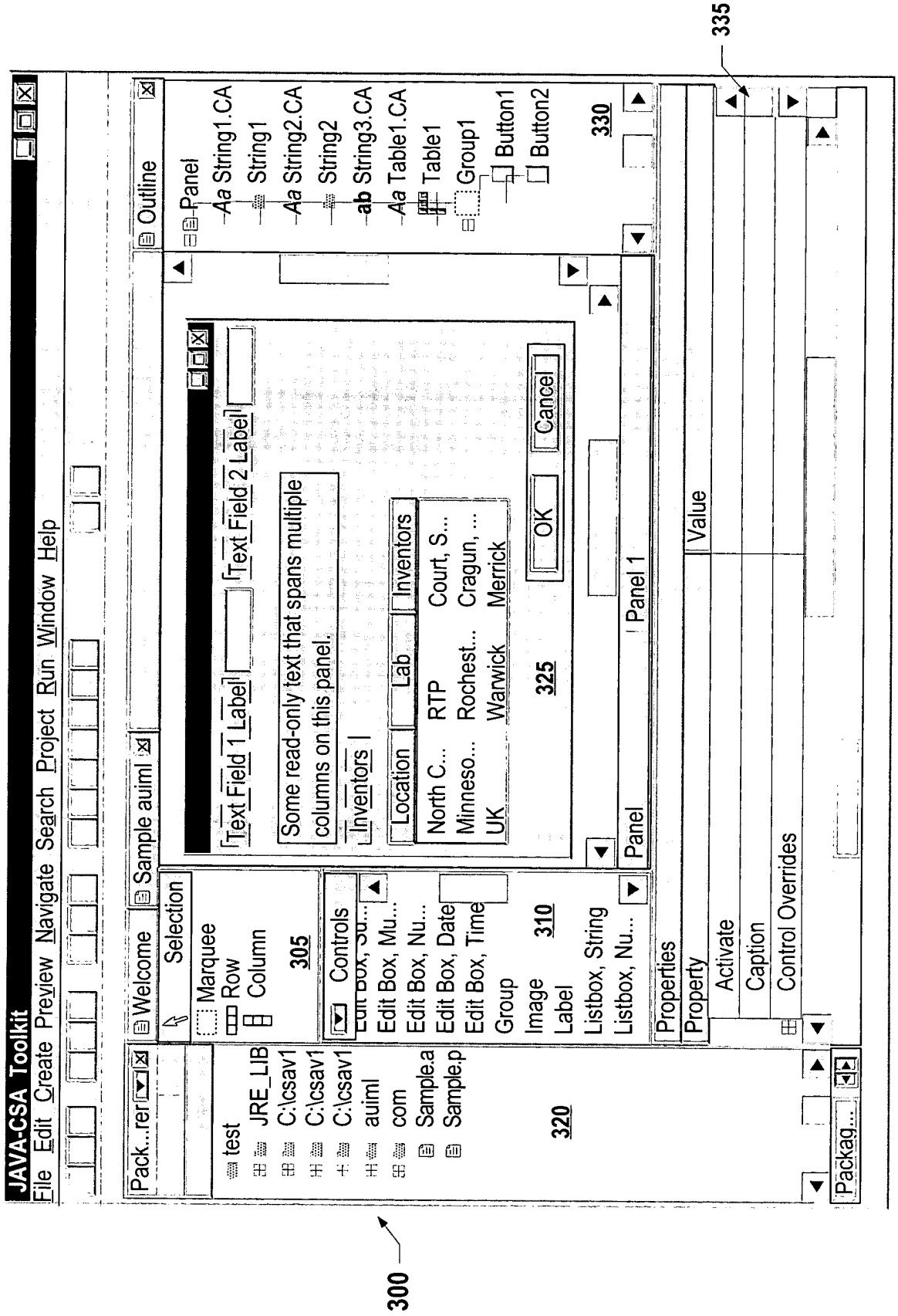
JAVA-CSA Toolkit
File Edit Create Preview Navigate Search Project Run Window Help
Pack...rer
Welcome
Sample auiml
Outline
Selection
Marquee
Row
Column
305
Controls
Edit Box, Mu...
Edit Box, Nu...
Edit Box, Date
Edit Box, Time
Group
Image
Label
Listbox, String
Listbox, Nu...
310
test
JRE_LIB
C:\csav1
C:\csav1
C:\csav1
auiml
com
Sample.a
Sample.p
320
Panel
Panel 1
Text Field 1 Label
Text Field 2 Label
Some read-only text that spans multiple columns on this panel.
Inventors
Location
Lab
Inventors
North C...
Minneso...
UK
RTP
Rochest...
Warwick
Court, S...
Cragun, ...
Merrick
OK
Cancel
325
Panel
Aa String1.CA
String1
Aa String2.CA
String2
ab String3.CA
Aa Table1.CA
Table1
Group1
Button1
Button2
330
Properties
Property
Value
Activate
Caption
Control Overrides
Packag...
335
300

Figure 3

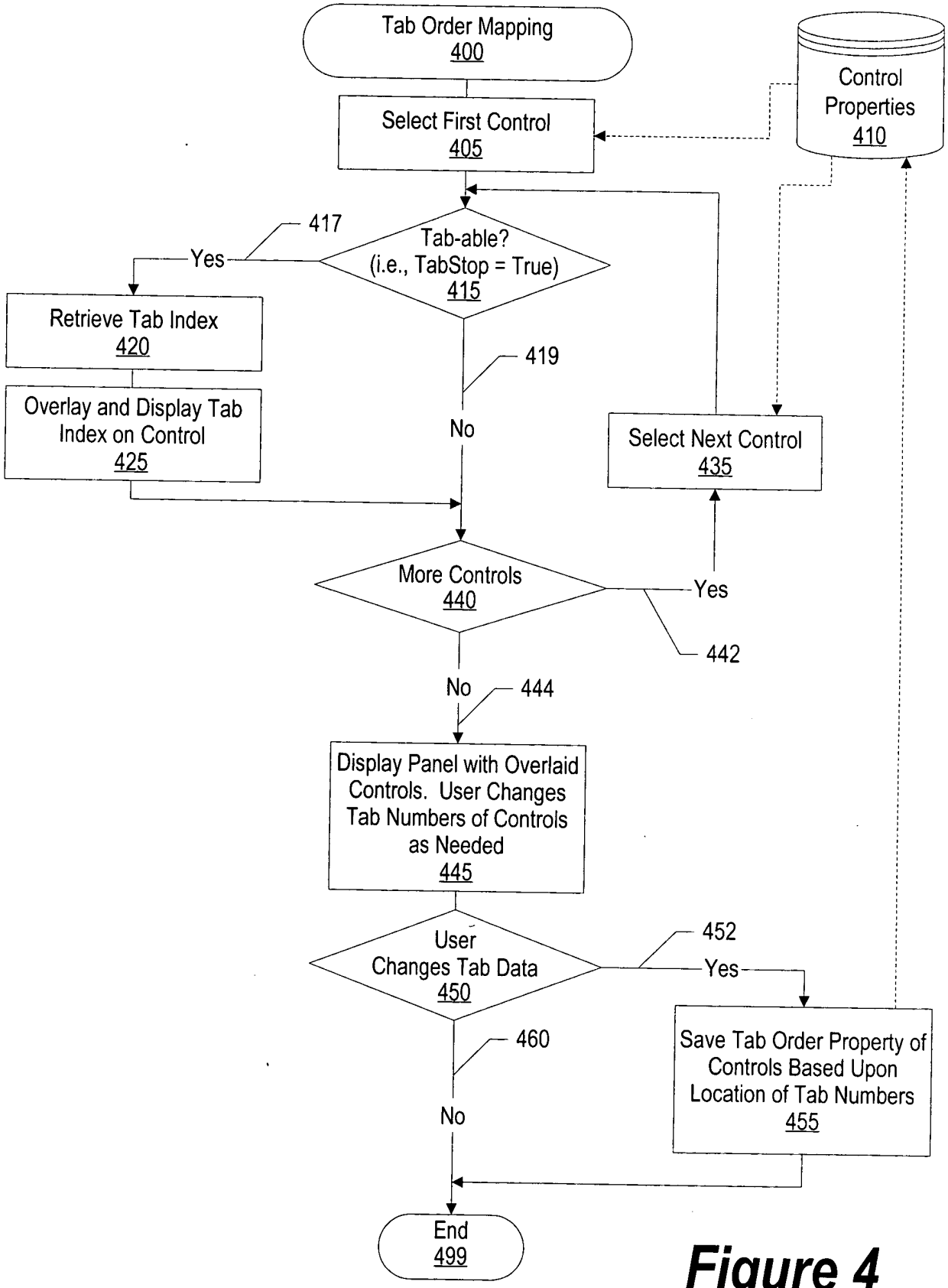
Tab Order Mapping
400
Select First Control
405
Control Properties
410
Tab-able?
(i.e., TabStop = True)
415
417
Yes
Retrieve Tab Index
420
Overlay and Display Tab Index on Control
425
419
No
Select Next Control
435
More Controls
440
Yes
442
No
444
Display Panel with Overlaid Controls. User Changes Tab Numbers of Controls as Needed
445
User Changes Tab Data
450
452
Yes
Save Tab Order Property of Controls Based Upon Location of Tab Numbers
455
460
No
End
499

Figure 4

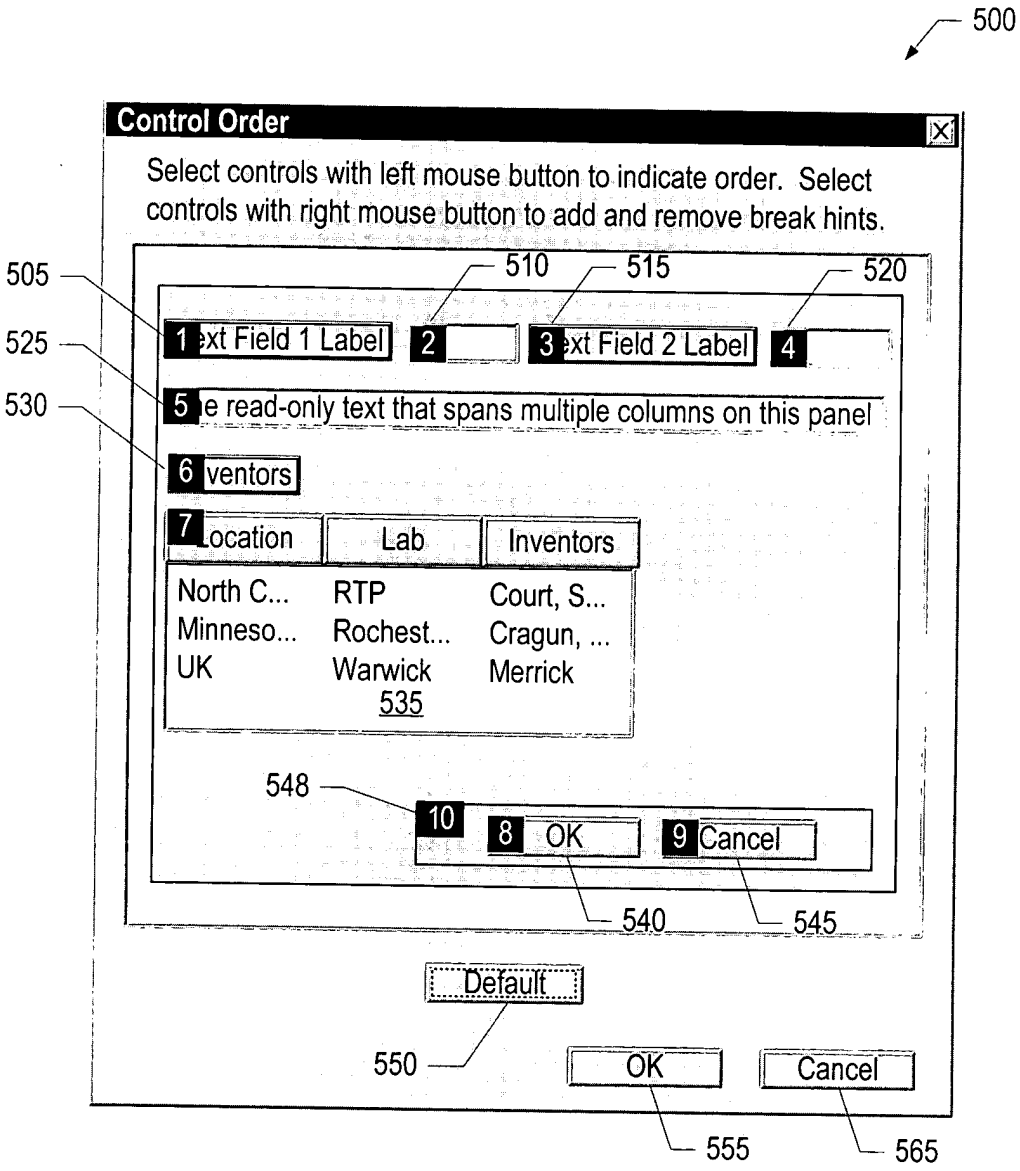
500
Control Order
Select controls with left mouse button to indicate order. Select controls with right mouse button to add and remove break hints.
505
510
515
520
525
530
1 ext Field 1 Label
2
3 ext Field 2 Label
4
5 e read-only text that spans multiple columns on this panel
6 ventors
7 ocation
Lab
Inventors
North C...
RTP
Court, S...
Minneso...
Rochest...
Cragun, ...
UK
Warwick
Merrick
535
548
10
8 OK
9 Cancel
540
545
Default
550
OK
Cancel
555
565

Figure 5

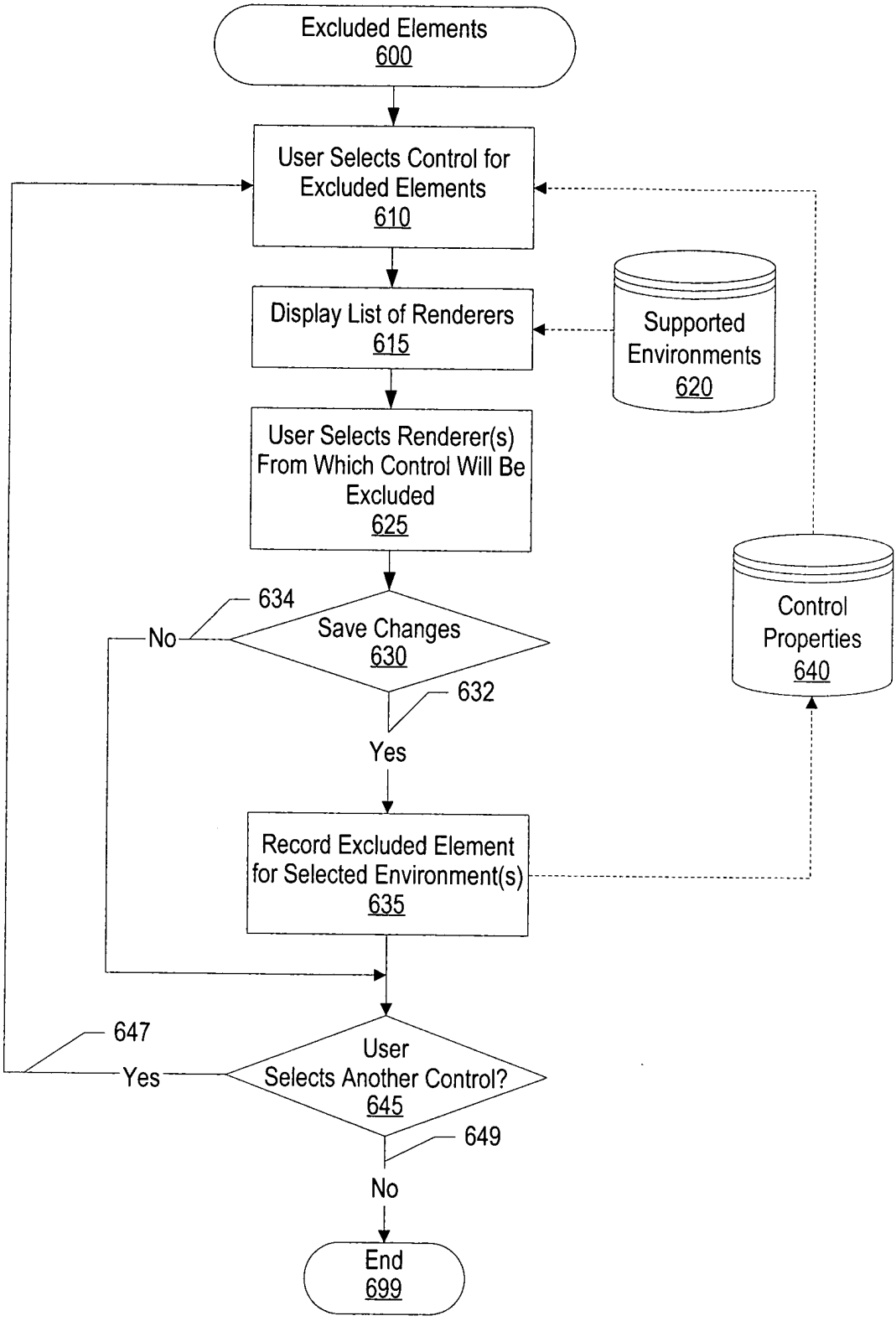
Excluded Elements
600
User Selects Control for Excluded Elements
610
Display List of Renderers
615
Supported Environments
620
User Selects Renderer(s) From Which Control Will Be Excluded
625
634
No
Save Changes
630
632
Yes
Control Properties
640
Record Excluded Element for Selected Environment(s)
635
647
Yes
User Selects Another Control?
645
649
No
End
699

Figure 6

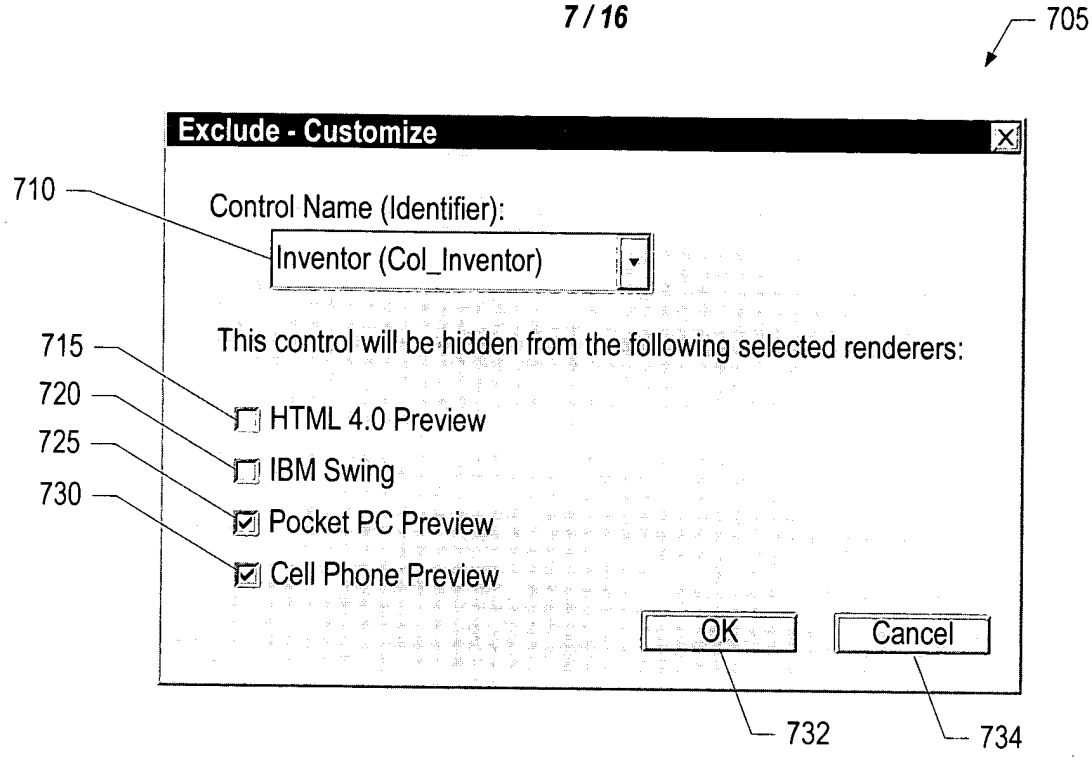

Figure 7A

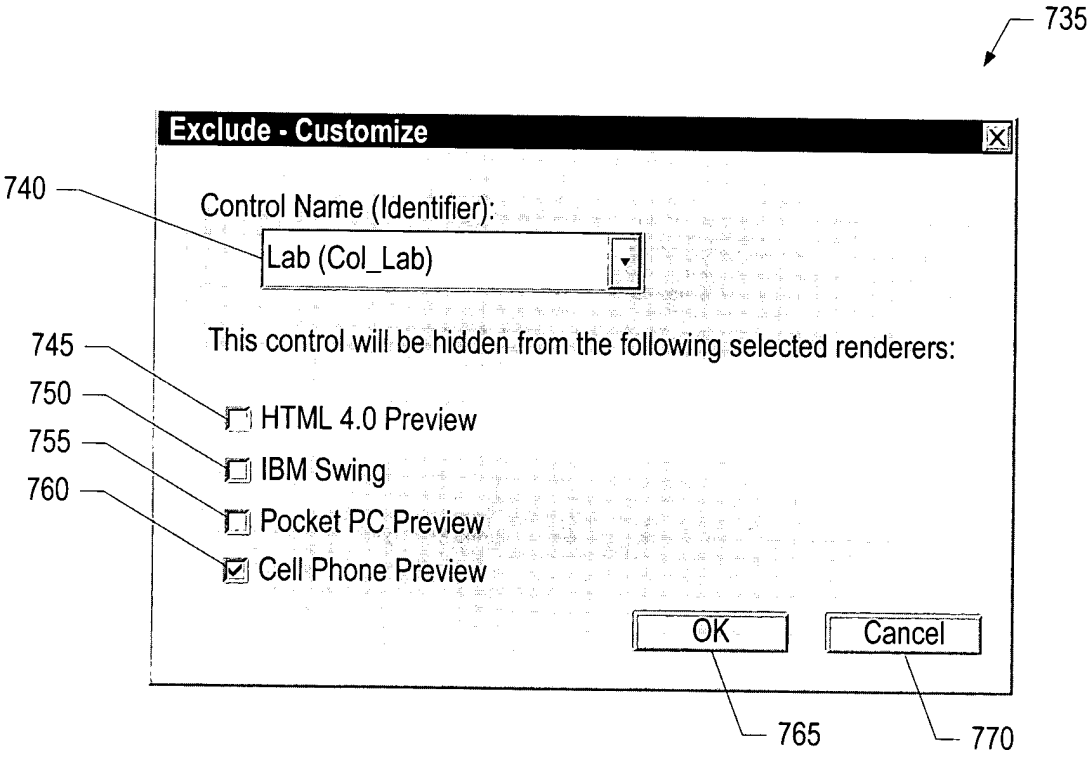

Figure 7B

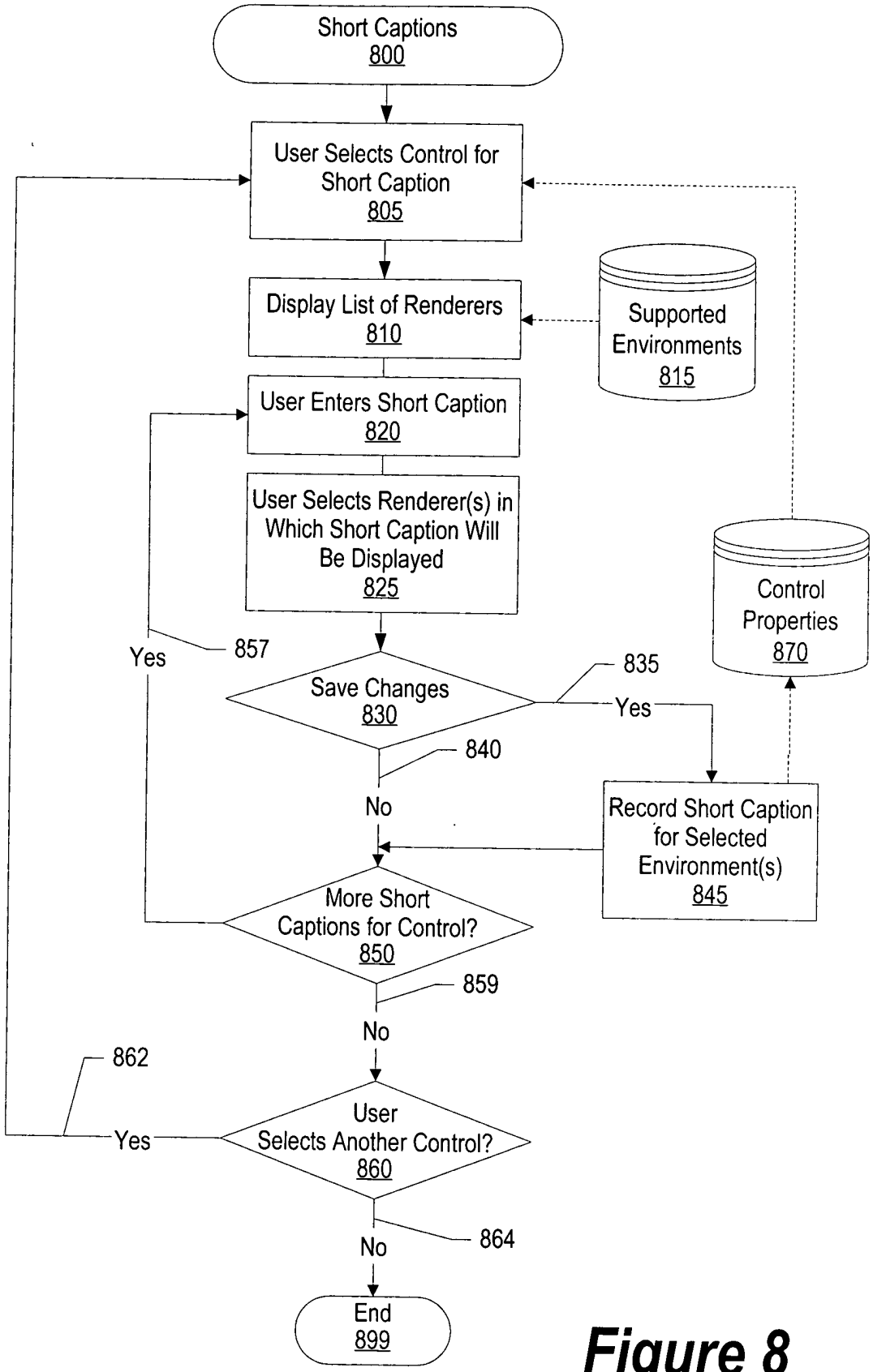
Short Captions
800
User Selects Control for Short Caption
805
Display List of Renderers
810
Supported Environments
815
User Enters Short Caption
820
User Selects Renderer(s) in Which Short Caption Will Be Displayed
825
Control Properties
870
Yes
857
Save Changes
830
835
Yes
840
No
Record Short Caption for Selected Environment(s)
845
More Short Captions for Control?
850
859
No
862
User Selects Another Control?
860
Yes
No
864
End
899

Figure 8

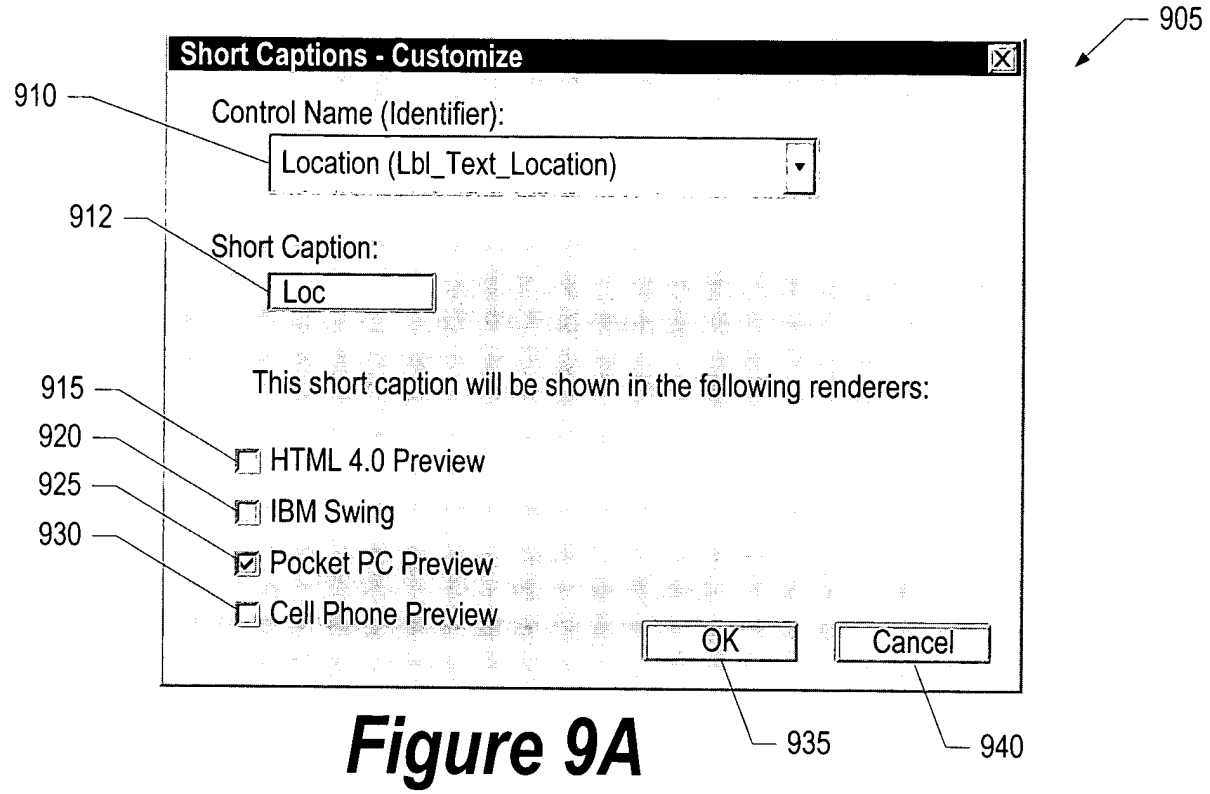

Figure 9A

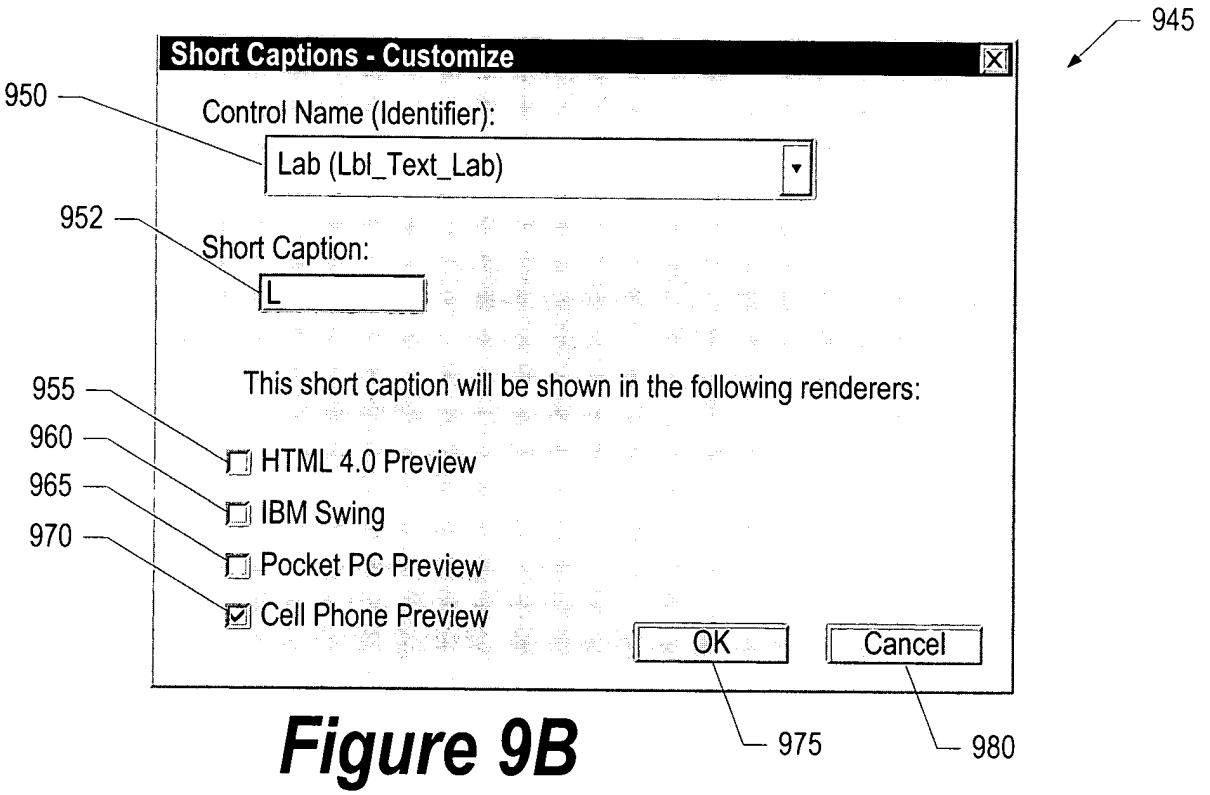

Figure 9B

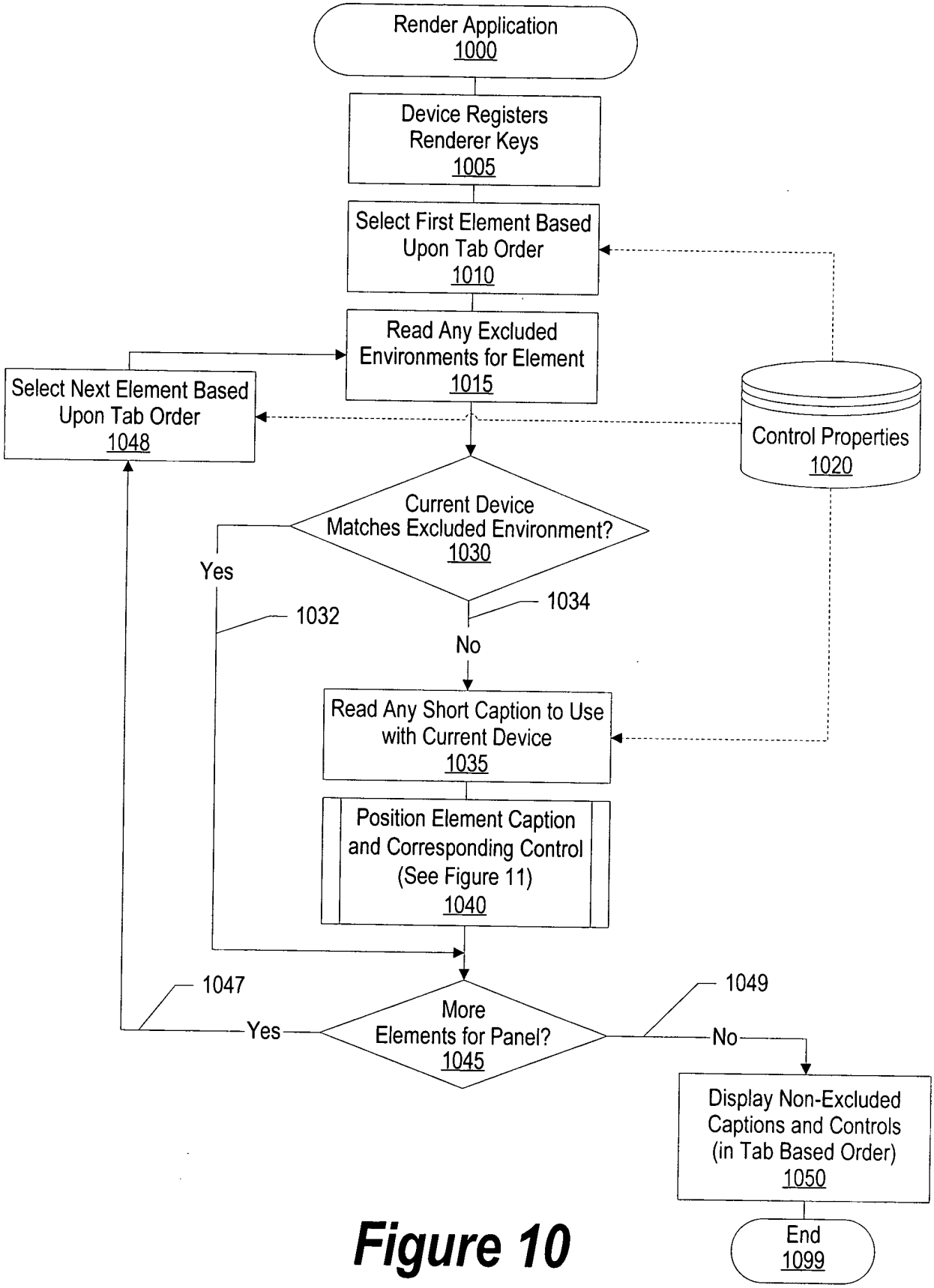
Render Application
1000
Device Registers
Renderer Keys
1005
Select First Element Based
Upon Tab Order
1010
Read Any Excluded
Environments for Element
1015
Select Next Element Based
Upon Tab Order
1048
Control Properties
1020
Current Device
Matches Excluded Environment?
1030
Yes
1032
1034
No
Read Any Short Caption to Use
with Current Device
1035
Position Element Caption
and Corresponding Control
(See Figure 11)
1040
1047
Yes
More
Elements for Panel?
1045
1049
No
Display Non-Excluded
Captions and Controls
(in Tab Based Order)
1050
End
1099

Figure 10

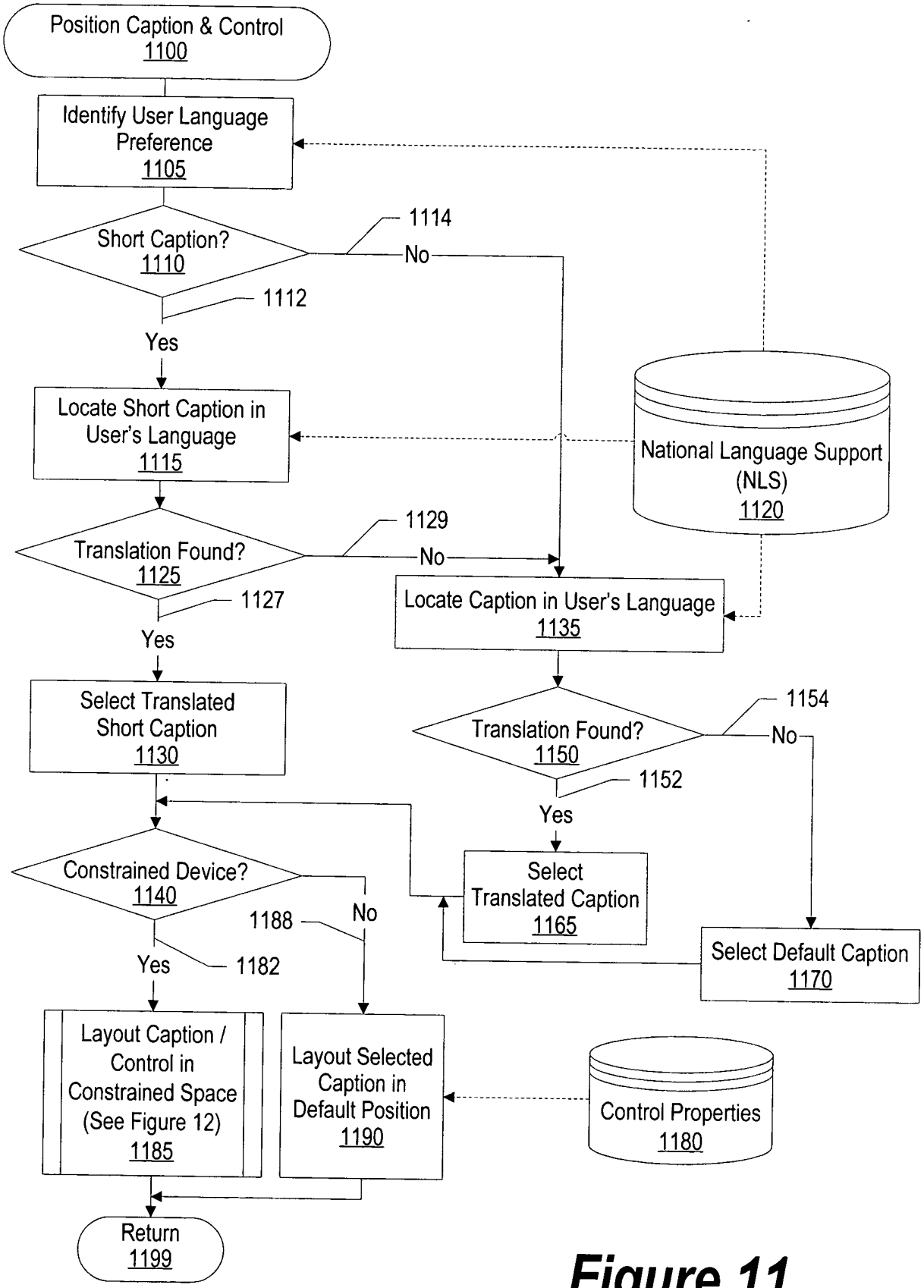
Position Caption & Control
1100
Identify User Language Preference
1105
Short Caption?
1110
1114
No
1112
Yes
Locate Short Caption in User's Language
1115
National Language Support (NLS)
1120
Translation Found?
1125
1129
No
1127
Yes
Locate Caption in User's Language
1135
Select Translated Short Caption
1130
Translation Found?
1150
1154
No
1152
Yes
Constrained Device?
1140
1188
No
Yes
1182
Select Translated Caption
1165
Select Default Caption
1170
Layout Caption / Control in Constrained Space (See Figure 12)
1185
Layout Selected Caption in Default Position
1190
Control Properties
1180
Return
1199

Figure 11

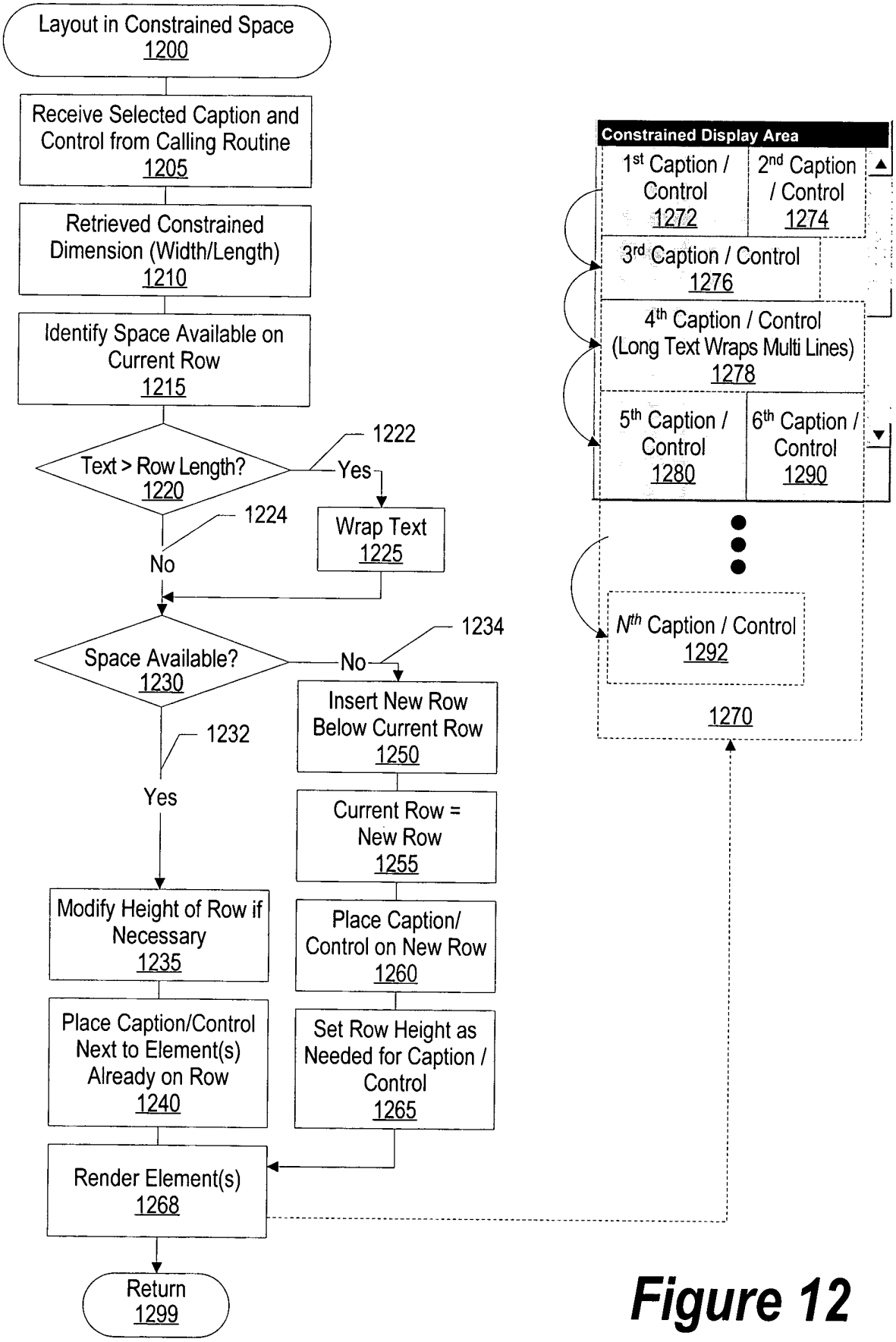
Layout in Constrained Space
1200
Receive Selected Caption and Control from Calling Routine
1205
Retrieved Constrained Dimension (Width/Length)
1210
Identify Space Available on Current Row
1215
Text > Row Length?
1220
1222
Yes
Wrap Text
1225
1224
No
Space Available?
1230
1234
No
Insert New Row Below Current Row
1250
1232
Yes
Current Row = New Row
1255
Modify Height of Row if Necessary
1235
Place Caption/ Control on New Row
1260
Place Caption/Control Next to Element(s) Already on Row
1240
Set Row Height as Needed for Caption / Control
1265
Render Element(s)
1268
Return
1299
Constrained Display Area
1st Caption / Control
1272
2nd Caption / Control
1274
3rd Caption / Control
1276
4th Caption / Control (Long Text Wraps Multi Lines)
1278
5th Caption / Control
1280
6th Caption / Control
1290
Nth Caption / Control
1292
1270

Figure 12

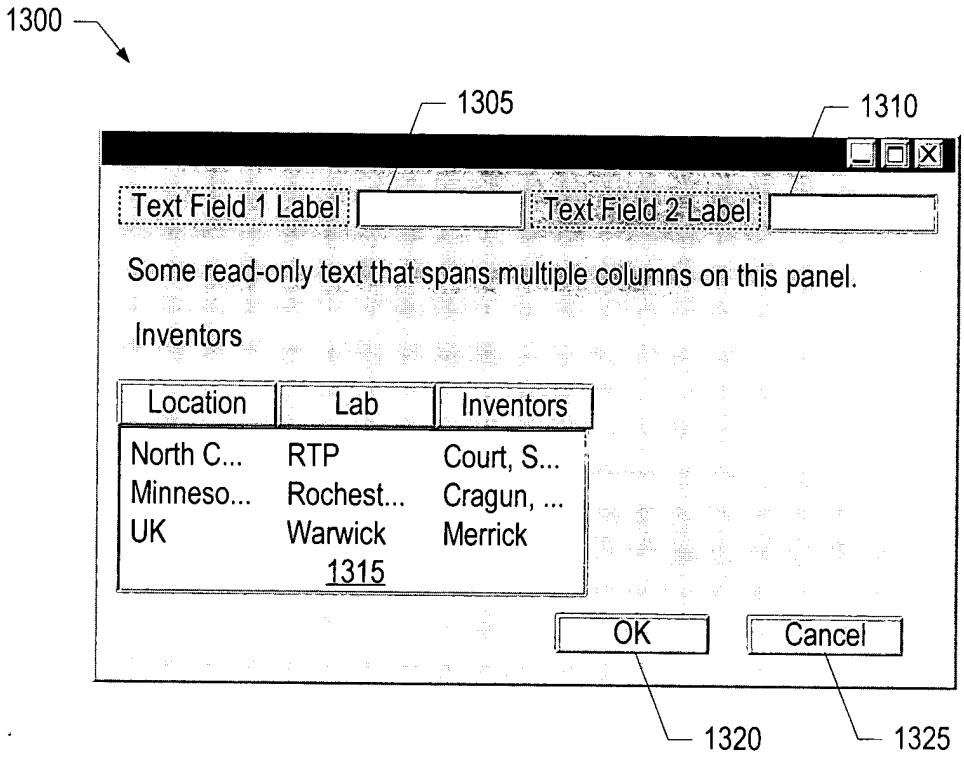
1300
1305
1310
Text Field 1 Label
Text Field 2 Label
Some read-only text that spans multiple columns on this panel.
Inventors
Location
Lab
Inventors
North C...
RTP
Court, S...
Minneso...
Rochest...
Cragun, ...
UK
Warwick
Merrick
1315
OK
Cancel
1320
1325

Figure 13

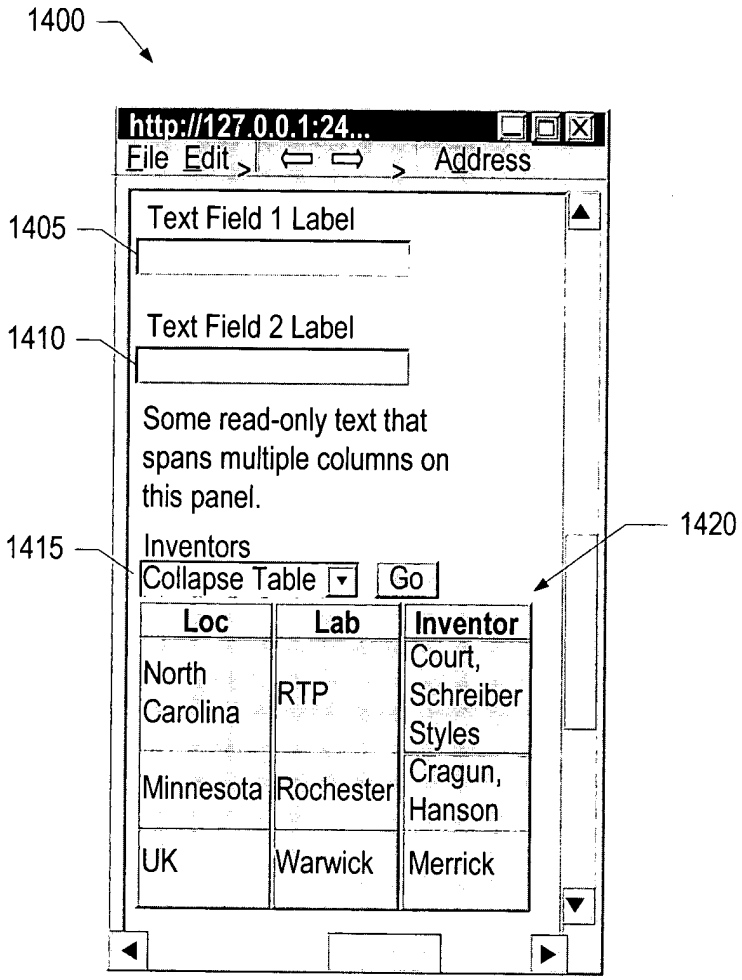
1400
http://127.0.0.1:24...
File Edit
Address
1405
Text Field 1 Label
1410
Text Field 2 Label
Some read-only text that spans multiple columns on this panel.
1415
Inventors
Collapse Table
Go
1420
Loc
Lab
Inventor
North Carolina
RTP
Court, Schreiber Styles
Minnesota
Rochester
Cragun, Hanson
UK
Warwick
Merrick

Figure 14

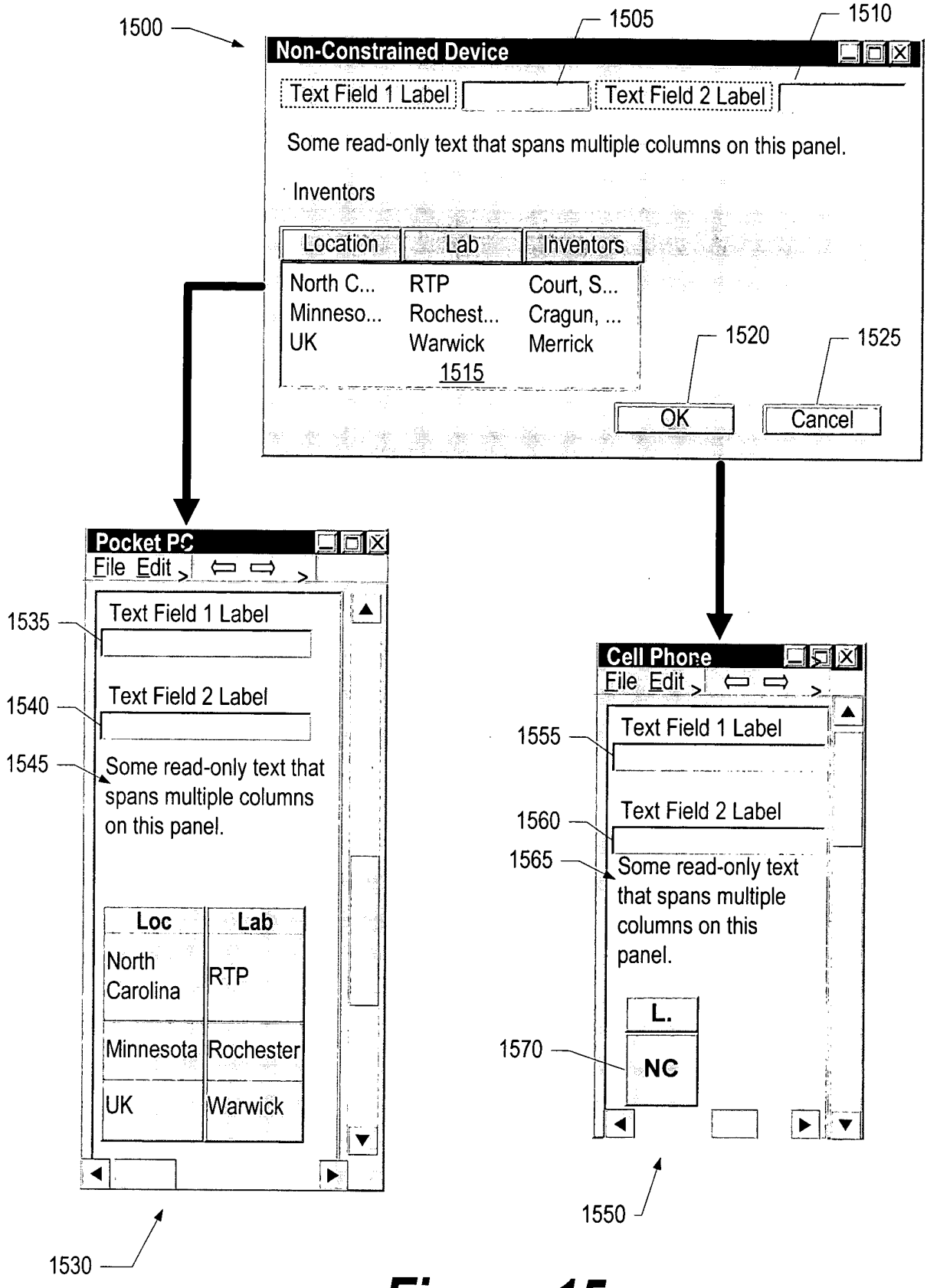
1500
1505
1510
Non-Constrained Device
Text Field 1 Label
Text Field 2 Label
Some read-only text that spans multiple columns on this panel.
Inventors
Location
Lab
Inventors
North C...
RTP
Court, S...
Minneso...
Rochest...
Cragun, ...
UK
Warwick
Merrick
1515
1520
1525
OK
Cancel
Pocket PC
File Edit
1535
Text Field 1 Label
1540
Text Field 2 Label
1545
Some read-only text that spans multiple columns on this panel.
Loc
Lab
North Carolina
RTP
Minnesota
Rochester
UK
Warwick
1530
Cell Phone
File Edit
1555
Text Field 1 Label
1560
Text Field 2 Label
1565
Some read-only text that spans multiple columns on this panel.
L.
1570
NC
1550

Figure 15

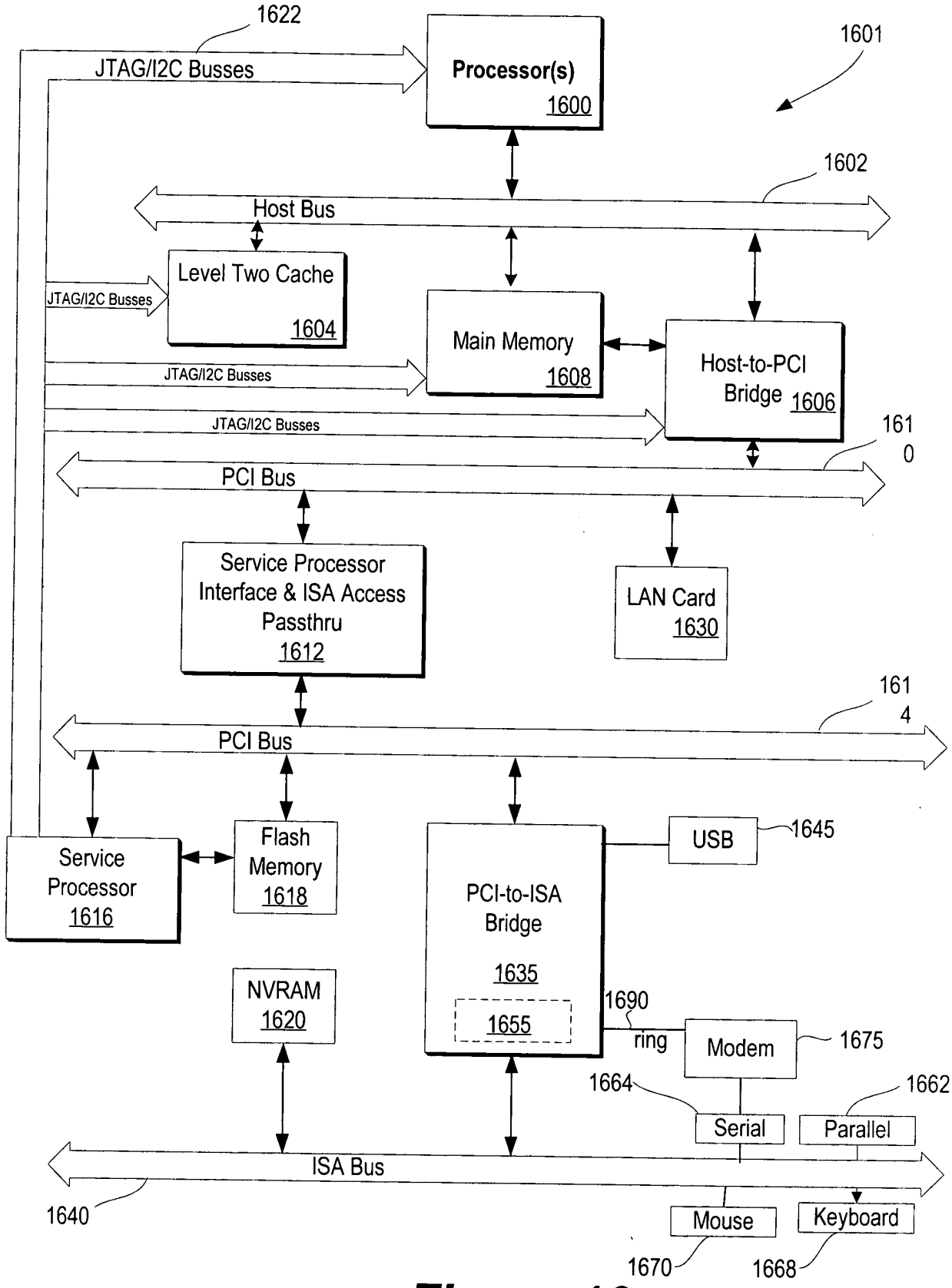
1622
JTAG/I2C Busses
Processor(s)
1600
1601
1602
Host Bus
Level Two Cache
1604
JTAG/I2C Busses
Main Memory
1608
Host-to-PCI
Bridge 1606
JTAG/I2C Busses
JTAG/I2C Busses
1610
PCI Bus
Service Processor
Interface & ISA Access
Passthru
1612
LAN Card
1630
1614
PCI Bus
Service
Processor
1616
Flash
Memory
1618
PCI-to-ISA
Bridge
1635
1655
USB
1645
NVRAM
1620
1690
ring
Modem
1675
1664
1662
Serial
Parallel
ISA Bus
1640
Mouse
Keyboard
1670
1668

Figure 16